

CHECK LIST OF ELOPOID AND CLUPEOID FISHES  
IN EAST AFRICAN COASTAL WATERS

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Introduction

During preliminary biological studies of the economically important fishes of the suborders Elopoidae and Clupeoidei in East African coastal waters, it was found that due to considerable confusion in the existing literature and the taxonomy of many genera, accurate identifications were often difficult.

A large collection of elopoid and clupeoid fishes has been made. Specimens have been obtained from purse-seine catches, by trawling in estuaries and shallow bays, by seining, handnetting under lamps at night, and from the catches of indigenous fishermen. A representative part of this collection has now been deposited in the British Museum (Natural History), London, where I was able to examine further material from the Western Indian Ocean during the summer of 1964. Based on these collections this check list has been prepared; a review on the taxonomy, fishery and existing biological knowledge of elopoid and clupeoid species in the East African area is in preparation.

Twenty-one species, representing seven families are listed here; four not previously published distributional records are indicated by asterisks.

Classification to familial level is based on Whitehead, P.J.P. (1963 a). Keys refer only to species listed and adult fishes. In the synonymy reference is made only to the original description and other subsequent records from the area. Only those localities are listed from which I have examined specimens.

East Africa refers to the coastal waters of Kenya and Tanzania and the offshore islands of Pemba, Zanzibar and Mafia; Eastern Africa refers to the eastern side of the African continent, i.e. from the Red Sea to Natal.

Key to the Suborders and Families

1. Lateral line present on body; abdominal scutes and pelvic scute always absent ..... Suborder ELOPOIDEI
  - (i) Mouth terminal; upper jaw bordered by maxillae and premaxillae:
    - (a) Last dorsal ray not filamentous; pseudobranch exposed ..... Family Elopidae
    - (b) Last dorsal ray filamentous; pseudobranch not exposed ..... Family Megalopidae
  - (ii) Mouth inferior; upper jaw bordered by premaxillae only ..... Family Albulidae
2. Lateral line absent on body; abdominal scutes often present, pelvic scute always present ..... Suborder CLUPEOIDEI
  - (i) Abdominal scutes absent:
    - (a) Body highly compressed; jaw teeth large and fang-like; dorsal origin much nearer caudal base than snout ..... Family Chirocentridae
    - (b) Body rounded; jaw teeth small, not fang-like; dorsal origin about mid-way between snout tip and caudal base ..... Family Dussumieriidae
  - (ii) Abdominal scutes present:
    - (a) Mouth terminal or sub-terminal, snout not pig-like; maxilla does not extend beyond posterior border of eye ..... Family Clupeidae
    - (b) Mouth inferior, snout pig-like; maxilla extends beyond posterior border of eye ..... Family Engraulidae

Suborder ELOPOIDEI

Family ELOPIDAE

Tenpounders

ELOPS Linnaeus, 1766

Elops Linnaeus, 1766, Syst.Nat.ed.12, 1 : 518 (type: Elops saurus).  
A single species in East African waters.

Elops machnata (Forskål)

Argentina machnata Forskål, 1775, Descript.Animal : xii, 68  
(type locality: Djedda, Red Sea).

Elops machnata: Günther, 1866, Fishes of Zanzibar : 121, fig. (caudal) (Zanzibar); Whitehead, 1962, Ann.Mag.nat.Hist. (13) 2 : 321 (Revision all spp.; Indo-Pacific specimens); Losse, 1964, E.A.M.F.R.O. Ann. Rep. 1963 : 12 (Zanzibar Channel).

Elops saurus: (part) Günther, 1868, Cat.Fish.Brit.Mus. 7 : 470 (Zanzibar, East Africa); Boulenger, 1909, Cat.Fresh Water Fish Africa, 1 : 25, fig. 17 (Zanzibar); (part) Copley, 1952,

Game Fishes of Africa : 53, fig. 34 (Malindi, Kilifi, Mombasa); Morrow, 1954, Ann.Mag.nat.Hist. (12) 7 : 803 (Shimoni, Kenya).

VERNACULAR NAMES: Makuronga (Malindi), Munyimbi (Shimoni), Mkizi (Zanzibar).

LOCALITIES: Dar-es-Salaam, Zanzibar, Shimoni, Mombasa, Malindi, Fundishu, Lamu.

RANGE: Eastern coast of Africa from the Red Sea to Algoa Bay; Seychelles, Aldabra, Comores, Madagascar, Mauritius. Widespread in Indo-Pacific to the East Indies, China, Japan and Hawaii.

#### Family MEGALOPIDAE

Tarpons

MEGALOPS Lacépède, 1803

Megalops Lacépède, 1803, Hist.Nat.Poiss., 5 : 289 (types: Megalops filamentosus Lacépède = Clupea cyprinoides Broussonet). A single Indo-Pacific species.

Megalops cyprinoides (Broussonet)

Clupea cyprinoides Broussonet, 1782, Ichthyol. (no pagination) pl. 9.

Elops cyprinoides: Günther, 1866, Fishes of Zanzibar : 122 (East Africa); Martens, 1869, in Deckens Reise Ost Africa, 3 (1) : 143 (Pangani River, Zanzibar).

Megalops cyprinoides: Günther, 1868, Cat.Fish.Brit.Mus. 7 : 471 (Zanzibar); Copley, 1952, Game Fishes of Africa : 54, fig. 35, pl. 3 (upper fig.) (Mombasa, Tanga, Zanzibar, Mafia); Losse, 1964, E.A.M.F.R.O. Ann. Rep. 1963 : 12 (Zanzibar Channel).

VERNACULAR NAMES: Pawale (general), Kumpanqu (Malindi).

LOCALITIES: Dar-es-Salaam, Zanzibar, Mombasa, Malindi.

RANGE: Eastern coast of Africa from Somalia to Algoa Bay; Seychelles, Aldabra, Comores, Madagascar, Mauritius. Widespread in Indo-Pacific, to the East Indies, Australia, Philippines and China.

#### Family ALBULIDAE

Lady Fishes

ALBULA Scopoli, 1777

Albula Scopoli, 1777, Introd.Hist.Nat. : 450 (on Gronow) (type: Esox vulpes Linnaeus).

A single species in all tropical seas.

Albula vulpes (Linnaeus)

Esox vulpes Linnaeus, 1758, Syst.Nat.ed.10, 1 : 313 (On Bone Fish Catesby, 1737, Hist.Nat.Carolina, pl. 2, fig. 1; Bahamas).

Butirinus glossodontus: Günther, 1866, Fishes of Zanzibar : 120 (Zanzibar).

Albula conorhynchus: Günther, 1868, Cat. Fish Brit. Mus., 7 : 468 (Zanzibar).

Albula vulpes: Copley, 1952, Game Fishes of Africa, : 56, pl. 3 (lower fig.) (East African coast; Lamu, Malindi, Kilifi, Mombasa).

VERNACULAR NAMES: Mbordede (Malindi), Mnymbyi (Zanzibar, Shimoni).

LOCALITIES: Zanzibar, Mombasa.

RANGE: Eastern coast of Africa from the Red Sea to Algoa Bay; Seychelles, Aldabra, Comores, Madagascar, Mauritius, Reunion. Cosmopolitan in tropical seas.

Suborder CLUPEOIDEI

Family CHIROCENTRIDAE

Wolf Herrings

CHIROCENTRUS Cuvier, 1817

Chirocentrus Cuvier, 1817, Regne Animal, 2 : 178 (type: Clupea dorab Forskål).

A single species in East African waters.

Chirocentrus dorab (Forskål)

Clupea dorab Forskål, 1775, Descript. Animal : xii, 72 (type locality: Djedda).

Chirocentrus dorab: Valenciennes, 1846, Hist. Nat. Poiss., 19 : 150, pl. 565 (Zanzibar); Günther, 1866, Fishes of Zanzibar : 120 (Zanzibar); Idem, 1868, Cat. Fish. Brit. Mus., 7 : 475 (Zanzibar); Bonde, 1934, Ann. Natal Mus. (7), 3 : 437 (Zanzibar); Copley, 1952, Game Fishes of Africa, : 56, pl. 5 (upper fig.) (East Africa: Lamu, Mombasa, Zanzibar, Dar-es-Salaam, Mafia); Morrow, 1954, Ann. Mag. nat. Hist. (12) 7 : 804 (Pemba); Losse, 1964, E.A.M.F.R.O. Ann. Rep. 1963 : 12 (Zanzibar Channel).

VERNACULAR NAMES: Bahanafu (Malindi), Panga (Mombasa), Mkonge (Zanzibar, Shimoni).

LOCALITIES: Dar-es-Salaam, Zanzibar, Mombasa, Malindi, Lamu.

RANGE: Eastern coast of Africa from the Red Sea to Natal; Seychelles, Aldabra, Comores, Madagascar, Mauritius. Widespread in Indo-Pacific, eastwards to the Philippines, China, Australia and Melanesia.

## Family DUSSUMIERIIDAE

## Round Herrings

## Key to the Genera

1. Branchiostegal rays 14-16: adults large (>130 mm. standard length) ..... Dussumieria
2. Branchiostegal rays 6-7: adults small (<80 mm. standard length) ..... Spratelloides

DUSSUMIERIA Valenciennes, 1857

Dussumieria Valenciennes, 1847, Hist.Nat.Poiss., 20 : 467  
(type: Dussumieria acuta Valenciennes).

A single species widespread in the Indo-Pacific region.

Dussumieria acuta Valenciennes

Dussumieria acuta Valenciennes, 1847, Hist.Nat.Poiss., 20 : 467,  
pl. 606 (type locality: Bombay); Whitehead, 1963, Bull.Brit.  
Mus.nat.Hist. (Zool.), 10 (6) : 312, figs. 1-5 (Revision, synonymy;  
Indo-Pacific specimens); Losse, 1964, E.A.M.F.R.O. Ann.Rep.  
1963 : 12 (Zanzibar Channel).

VERNACULAR NAMES: Dagaa la upapa (Zanzibar).

LOCALITIES: Dar-es-Salaam, Zanzibar, Kenya, (a single specimen from  
the stomach of a sailfish).

RANGE: Eastern coast of Africa from the Red Sea to Madagascar. Indo-  
Pacific east to Japan.

SPRATELLOIDES Bleeker, 1852

Spratelloides Bleeker, 1852, Natuurk.Tijdschr.Ned.Ind., 2 : 214  
(type: Clupea argyrotaeniata Bleeker = Clupea gracilis Schlegel).

## Key to the Species

1. Anal rays 11-14; a prominent silver lateral band ... S. gracilis
2. Anal rays 9-11; no silver band, whole of sides  
silvery ..... S. delicatulus

Spratelloides gracilis (Schlegel)

Clupea gracilis Schlegel, 1846, Faun.Japan Poiss., pts. 10-14 : 238,  
pl. 108, fig. 2 (type locality: Japan).

Spratelloides japonicus: Morrow, 1954, Ann.Mag.nat.Hist. (12) 7 : 804  
(Mkoani Harbour, Pemba).

Check List of Elopoid and Clupeoid Fishes

Spratelloides gracilis: Whitehead, 1963, Bull. Brit. Mus. nat. Hist. (Zool.), 10 (6): 388, figs. 15-18 (Revision, synonymy: Red Sea and Pacific specimens).

VERNACULAR NAMES: None known.

LOCALITIES: Mafia, Zanzibar.

RANGE: East African coast. Elsewhere: Red Sea, Indo-Pacific east to Japan and Samoa.

Spratelloides delicatulus (Bennett)

Clupea delicatula Bennett, 1831, Proc. zool. Soc. Lond., 1 : 168 (type locality: Mauritius).

Spratelloides delicatulus: Jatzow & Lenz, 1899, Abhandl. Senckenberg. Naturf. Ges., xxi, 3 : 526 (no locality, East African collection); Morrow, 1954, Ann. Mag. nat. Hist. (12) 7 : 804 (Mkoani Harbour, Pemba); Whitehead, 1963, Bull. Brit. Mus. nat. Hist. (Zool.), 10 (6) : 345, figs. 16-17 (Revision, synonymy; Indo-Pacific specimens).

VERNACULAR NAMES: Dagaa (general).

LOCALITIES: Mafia, Zanzibar, Kilifi.

RANGE: Eastern coast of Africa from the Red Sea to Zululand; Seychelles, Aldabra, Comores, Madagascar, Mauritius. Widespread in Indo-Pacific, eastwards to Australia.

Family CLUPEIDAE

Herrings

Key to the Genera

1. Anal short, of less than 30 rays; hypomaxillary bone absent:
  - (i) Upper jaw without deep median notch:
    - (a) Few (3-5) fronto-parietal striae, last two anal rays not enlarged, vertical striae of scales generally complete ..... Herklotichthys
    - (b) Many (more than 7) fronto-parietal striae; last two anal rays enlarged; vertical striae of scales incomplete ..... Sardinella
  - (ii) Upper jaw with prominent deep median notch ..... Hilsa
2. Anal long, of more than 30 rays; a small toothed hypomaxillary bone present ..... Pellona

HERKLOTICHTHYS Whitley, 1951.

Herklotichthys Whitley, 1951, Proc. Roy. zool. Soc. N.S.W. 1949-50 : 67.

Harengula Valenciennes (part i.e. Indo-Pacific species only), 1847, Hist. nat. Poiss., 20 : 301 (type: Harengula latulus Val. = Clupea

macroptalma Ranzanzi, designated by Gill, 1861, Proc.Acad.nat.Sci.Philad. : 36).

Indo-Pacific species of Harengula have been separated from New World species on the basis of a toothed hypomaxilla being present in the latter (Berry, 1963); Herklotischthys Whitley replaces Harengula Valenciennes for the Indo-Pacific species (Whitehead, 1963 b).

Two species occur in the Western Indian Ocean, H. punctatus (Rupp.) and H. vittatus (Val.); although the latter has been recorded from Natal (Barnard, 1925; Smith, 1961), Mauritius (Baissac, 1951), Madagascar (Fourmanoir, 1957) and the Gulf of Aden (Whitehead, 1964), I can find no record of occurrence in East African waters.

#### Herklotischthys punctatus (Ruppell)

Clupea punctata Ruppell, 1837, Neue Wirbelth.Fische : 78, pl. 21, fig. 2 (type locality: Red Sea).

Alosa punctata: Günther, 1866, Fishes of Zanzibar : 23 (Zanzibar).

Clupea venenosa: Günther, 1868, Cat.Fish.Brit.Mus., 7 : 449 (Zanzibar).

Harengula punctata: Regan, 1917, Ann.Mag.nat.Hist. (8) 19 : 390 (East Africa); Losse, 1964, E.A.M.F.R.O.Ann.Rep. 1963 : 11 (Zanzibar Channel).

VERNACULAR NAMES: Dagaa la upapa (Zanzibar), Simu (Kenya), Dagaa (small specimens - general).

LOCALITIES: Dar-es-Salaam, Zanzibar, Tanga, Mombasa, Milindi, Formosa Bay.

RANGE: Eastern coast of Africa from the Red Sea to Durban; Seychelles, Aldabra, Madagascar, Mauritius. Widespread in Indo-Pacific, east to Japan, Australia and Polynesia.

#### SARDINELLA Valenciennes, 1847

Sardinella Valenciennes, 1847, Hist.Nat.Poiss., 20 : 28 (type: Sardinella aurita Val., designated by Gill, 1861, Proc.Acad.nat.Sci.Philad. : 35).

#### Key to the Species

1. Abdominal scutes strongly keeled, sharp and exposed; abdomen highly compressed; 46 or more gill rakers on lower part of 1st gill arch:
  - (i) Pelvic rays 9; more than 150 gill rakers on lower part of 1st gill arch ..... S. longiceps
  - (ii) Pelvic rays 8; less than 60 gill rakers on lower part of 1st gill arch:
    - (a) Body depth 31.0% (generally 32% - 34%) of standard length; 46-54 gill rakers on lower part of 1st gill arch ..... S. bulan
    - (b) Body depth 25.0% - 31.6% (generally 26% - 28%) of standard length; 47-57 gill rakers on lower part of 1st gill arch ..... S. jussieu

2. Abdominal scutes feebly keeled, hardly exposed,  
abdomen smooth and rounded: 35-43 gill rakers  
on lower part of 1st gill arch ..... S. sirm

Sardinella longiceps Valenciennes

Sardinella longiceps Valenciennes, 1847, Hist.Nat.Poiss., 20 : (198)  
273 (type locality: Pondicherry); Regan, 1917, Ann.Mag.nat.Hist.  
(8) 19 : 379 (Mombasa).

LOCALITIES: Mombasa.

RANGE: Eastern coast of Africa from the Gulf of Aden to Mombasa;  
Seychelles. Indo-Pacific east to Indonesia and the Philippines.

Sardinella bulan (Bleeker)

Clupalosa bulan Bleeker, 1849, Verh.Bat.Gen., 22 : 12 (type locality:  
Java).

Alosa kowal: Günther, 1866, Fishes of Zanzibar : 123 (Zanzibar).

Clupea kowal: Günther, 1868, Cat.Fish.Brit.Mus., 7 : 450 (Zanzibar).

Sardinella perforata: Regan, 1917, Ann.Mag.nat.Hist. (8) 19 : 382  
(Indian Ocean); Losse, 1964, E.A.M.F.R.O. Ann.Rep. 1963 : 11  
(Zanzibar Channel).

Sardinella bulan: Whitehead, 1964, Bull.Brit.Mus.nat.Hist.(Zool.) 12  
(7) : 250 (Zanzibar).

VERNACULAR NAMES: Daqaa la upapa (Zanzibar), Daqaa (small specimens -  
general).

LOCALITIES: Zanzibar, Pangani estuary, Tanga, Mombasa.

RANGE: Eastern coast of Africa from the Gulf of Aden to Lourenco  
Marques; Madagascar. Indo-Pacific to the East Indies,  
Philippines, Siam, Amoy and Polynesia.

Sardinella jussieu (Lacépède)

Clupanodon jussieu Lacépède, 1803, Hist.Nat.Poiss., 5 : 469, 474,  
pl. 11, fig. 2 (type locality: Mauritius).

?Clupea tembang: Jatzow & Lenz, 1899, Abhandl.Senckenberg.Naturf.Ges.,  
xxi, 3 : 526 (Zanzibar).

Sardinella gibbosa: Regan, 1917, Ann.Mag.nat.Hist. (8) 19 : 383  
(Mombasa, Indian Ocean).

Sardinella jussieu: Bonde, 1934, Ann.Natal.Mus. (7) 3 : 437  
(Zanzibar); Losse, 1964, E.A.M.F.R.O. Ann.Rep. 1963 : 11  
(Zanzibar Channel).

VERNACULAR NAMES: Daqaa la upapa (Zanzibar), Simu (Kenya), Daqaa  
(small specimens - general).

LOCALITIES: Dar-es-Salaam, Zanzibar, Tanga, Mombasa, Malindi.

RANGE: Eastern coast of Africa from the Red Sea to Natal; Seychelles,

Mauritius, Madagascar. Widespread in Indo-Pacific; East Indies, China, Australia, Micronesia and Polynesia.

Sardinella sirm (Walbaum)

Clupea sirm Walbaum, Artedi Pisc., 3 : 38 (on Forskål, 1775, Descript. Animal : 17); Günther, 1868, Cat.Fish.Brit.Mus., 7 : 425 (Zanzibar).

Alosa sirm: Günther, 1866, Fishes of Zanzibar : 123 (Zanzibar).

Sardinella sirm: Regan, 1917, Ann.Mag.nat.Hist. (8) 19 : 385 (Zanzibar, Indian Ocean); Losse, 1964, E.A.M.F.R.O. Ann.Rep. 1963 : 11 (Zanzibar Channel).

VERNACULAR NAMES: Daqaa la upapa (Zanzibar), Simu (Kenya).

LOCALITIES: Dar-es-Salaam, Zanzibar, Mombasa.

RANGE: Eastern coast of Africa from the Red Sea to Madagascar; Seychelles, Aldabra. Widespread in Indo-Pacific; East Indies, Philippines, China, Micronesia and Polynesia.

HILSA Regan, 1917.

Hilsa Regan, 1917 Ann.Mag.nat.Hist. (8) 19 : 303 (type: Clupea durbanensis Regan).

A single species in East African coastal waters.

Hilsa kelee (Cuvier)

Clupea kelee Cuvier, 1829, Regne Animal., ed. 2, 2 : 320 (name in footnote, based on Kelee Russell, 1803, Fishes of Coromandel, 2 : 75, pl. 195; type locality: Vizagapatam).

Alosa chapra: Günther, 1866, Fishes of Zanzibar : 123 (Zanzibar).

Clupea ilisha: Günther, 1868, Cat.Fish.Brit.Mus., 7 : 445 (Zanzibar).

Hilsa kelee: Whitehead, 1964, Bull.Brit.Mus.nat.Hist. (Zool.) 12 (4) : 129, fig. 8 (Revision, synonymy; Sabaki estuary, Kenya).

VERNACULAR NAMES: Makrenge (Mombasa), Pawali (general).

LOCALITIES: Ruvu estuary, Pangani estuary, Mombasa, Malindi, Sabaki estuary.

RANGE: Eastern coast of Africa from the Gulf of Aden to Natal; Madagascar. Western Indo-Pacific to Burma and Siam.

PELLONA Valenciennes, 1847.

Pellona Valenciennes, 1847, Hist.Nat.Poiss., 20 : (218) 300  
(type: Pellona orbyqnyana Val., designated by Gill, 1861,  
Proc.Acad.nat.Sci.Philad., : 38).

A single Indo-Pacific species\*.

Pellona ditchela Valenciennes

Pellona ditchela Valenciennes, 1847, Hist.Nat.Poiss., 20 : (228) 314  
(on Ditchelee Russell, 1803, Fishes of Coromandel, 2 : 72  
pl. 188; type locality: Vizagapatam).

Pellona ditchoa: Günther, 1866, Fishes of Zanzibar : 122 (East Africa);  
Idem, 1868, Cat.Fish.Brit.Mus., 7 : 455 (Zanzibar, East Africa).

Neosteus ditchela: Norman, 1923, Ann.Mag.nat.Hist. (9) 11 : 17  
(East Africa).

VERNACULAR NAMES: Chaa (general), Simu koko (Malindi), Simu (general).

LOCALITIES: Ruu estuary, Pangani estuary, Zanzibar, Mombasa, Malindi,  
Formosa Bay.

RANGE: Eastern coast of Africa from Kenya to Delagoa Bay; Madagascar.  
Coasts of India.

\* The genus Pellona, primarily composed of New World species, differs  
from the Indo-Pacific genus Ilisha by the possession of a toothed  
hypomaxilla, lying between the end of the pre-maxillary and centre  
of maxillary jaw bones. In Ilisha this bone is replaced by a  
ligament; this genus has not been recorded from our area.

Family ENGRAULIDAE

Anchovies

Key to the Genera

1. Abdominal scutes confined to pre-pelvic region..... Stolephorus
2. Post-pelvic scutes present:
  - (i) No pre-pectoral scutes; pseudobranch exposed.... Thrissina
  - (ii) Pre-pectoral scutes present; pseudobranch  
not exposed ..... Thryssa

STOLEPHORUS Lacépède, 1803.

Stolephorus Lacépède, 1803, Hist.Nat.Poiss., 5 : 381  
(type: Stolephorus commersonii Lacepede).

Key to the Species

1. Anal origin under or behind last dorsal ray; muscular  
portion of isthmus short, not reaching posterior  
border of branchiostegal membranes:
  - (i) Posterior tip of maxilla pointed, projecting  
well behind 2nd supramaxilla ..... S. heterolobus
  - (ii) Posterior tip of maxilla truncated,  
hardly projecting beyond 2nd supramaxilla..S. buccaneeri

2. Anal origin under posterior third of dorsal base;  
 muscular portion of isthmus long, projecting  
 forward beyond hind border of branchiostegal  
 membranes:  
 (i) Posterior tip of maxilla does not project  
 beyond posterior border of pre-operculum;  
 abdominal scutes 4-5 ..... S. indicus  
 (ii) Posterior tip of maxilla reaches gill  
 opening; abdominal scutes 4-7..... S. commersoni

\*Stolephorus heterolobus (Rüppell)

Engraulis heteroloba Rüppell, 1837, Neue Wirbelth.Fische : 79, pl.21,  
 fig. 4 (type locality: Massaua).

VERNACULAR NAMES: Dagaa uronda (Zanzibar), Kumbu (Kenya).

LOCALITIES: Dar-es-Salaam, Zanzibar, Mombasa, Malindi.

RANGE: East African coast, Madagascar, Red Sea and the Suez Canal  
 (Whitehead, 1964); Madras, East Indies and Australia.

\*Stolephorus buccaneeri Strasburg

Stolephorus buccaneeri Strasburg, 1960, Pacific Science, 14 (4) : 396  
 (type locality: Hawaii).

VERNACULAR NAMES: None known.

LOCALITIES: Mombasa (Port Tudor).

RANGE: East African coast (only known from Mombasa); elsewhere:  
 Durban, Red Sea, Persian Gulf, "Arabia" (Whitehead, 1964) and  
 Hawaii.

Stolephorus indicus (Van Hasselt)

Engraulis indicus Van Hasselt, 1823, Alg.Konst-en Letter-Bode, 1, (23)  
 329 (type locality: Java).

Engraulis russellii: Jatzow & Lenz, 1899, Abhandl.Senckenberg Naturf.  
Ges., xxi, 3 : 525 (Zanzibar).

Anchoviella indica: Morrow, 1954, Ann.Mag.nat.Hist. (12) 7 : 804  
 (Mkoani harbour, Pemba).

Stolephorus indicus: Losse, 1964, E.A.M.F.R.O. Ann.Rep.1963 : 12  
 (Zanzibar Channel).

VERNACULAR NAMES: Dagaa uronde (Zanzibar), Kumbu (Kenya).

LOCALITIES: Dar-es-Salaam, Zanzibar, Mombasa, Malindi.

RANGE: Eastern coast of Africa from the Red Sea to Natal; Madagascar,  
 Aldabra. Widespread in Indo-Pacific to the East Indies,  
 Philippines, China, Formosa, Melanesia, Micronesia and Polynesia.

\* Not previously recorded from East Africa.

Stolephorus commersoni Lacépède

Stolephorus commersoni Lacépède, 1803, Hist.Nat.Poiss., 5 : 381, pl.12,  
fig. 1 (no locality, on Commerson).

Engraulis brownii: Günther, 1866, Fishes of Zanzibar : 123 (Zanzibar).

Engraulis commersonianus: Günther, 1868, Cat.Fish.Brit.Mus., 7 : 388  
(Zanzibar).

VERNACULAR NAMES: Kumbu (Kenya).

LOCALITIES: Zanzibar, Ruvu estuary, Pangani estuary, Mombasa, Malindi.

RANGE: East African coast south to Durban; Madagascar, Mauritius.

Widespread in Indo-Pacific; Arabia, East Indies, Philippines,  
China, Formosa, Korea and Polynesia.

THRISSINA Jordan & Seal, 1925

Thrissina Jordan & Seal, 1925, Copeia No. 141 : 30

(type: Clupea baelama Forskål).

A monotypic, Indo-Pacific genus.

Thrissina baelama (Forskål)

Clupea baelama Forskål, Descript. Animal. : 72

(type locality: Djedda).

Engraulis boelama (mis-spelt): Günther, 1866, Fishes of Zanzibar :  
123 (Zanzibar); Idem, 1868, Cat.Fish.Brit.Mus., 7 : 393  
(Zanzibar); Idem, 1871, Proc.Zool.Soc.London : 671 (Zanzibar).

VERNACULAR NAMES: Daqaa (Zanzibar), Simu (Kenya).

Localities: Dar-es-Salaam, Zanzibar, Mombasa, Malindi.

RANGE: Eastern coast of Africa from the Red Sea to Madagascar;  
Seychelles, Mauritius, Reunion. Widespread in Indo-Pacific,  
to the Philippines, Melanesia, Micronesia and Polynesia.

THRYSSA Cuvier, 1829

Thryssa Cuvier, 1829, Régne Animal, ed. 2, 2 : 323.

(type: Clupea setirostris Broussonet).

Key to the Species

1. Maxilla does not extend beyond tip of pectoral fins ..... T. vitrirostris
2. Maxilla extends beyond tip of pelvic fins ..... T. setirostris

\*Thryssa vitrirostris (Gilchrist & Thompson)

Engraulis vitrirostris Gilchrist & Thompson, 1908-11, Ann.S.Afr.Mus.  
6 : 201 (localities: Natal; inner harbour, Durban).

\* Not previously recorded from East Africa.

VERNACULAR NAMES: None known.

LOCALITIES: Zanzibar, Ruvu estuary, Pangani estuary, Mombasa, Malindi, Formosa Bay.

RANGE: East African coast south to East London; Madagascar, Aldabra. Persian Gulf of Oman (Whitehead, 1964), coast of India.

\*Thryssa setirostris (Broussonet)

Clupea setirostris Broussonet, 1782, Ichth., 1, pl. 2  
(type locality: Society Islands).

VERNACULAR NAMES: None known.

LOCALITIES: Ruvu estuary, Pangani estuary, Malindi, Formosa Bay.

RANGE: Eastern coast of Africa from the Red Sea to Natal; Madagascar, Aldabra. Widespread in Indo-Pacific, to China, Queensland and Polynesia.

\* Not previously recorded from East Africa

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